

IA Culvert Hydraulics Software, V2.0

The installation files are for version 2.0 of the IA Culvert Hydraulics software.

To install version 2.0:

There are 3 installation files:

- IACHV2.CAB
- Setup.exe
- Setup.LST

Create a new folder (perhaps named IACUL2Install) on the hard-disk of your computer. Save the self-extracting zipped file (ECulHyd.exe) from the website which contains the 3 above files to this folder. Double click the file to extract the contained files. Then go to the folder and run the setup.exe file (double click on it in Windows Explorer). This will start the installation program. Follow the instructions to install.

The installation will install version 2.0 as a new program, it will not replace version 1.0.

The following is an overview of version 2.0

Please note that the user manual for version 2.0 is online and is installed as part of the installation. After starting up the version 2.0 software, you can press the F1 key to bring up the online user manual.

The Iowa Culvert Hydraulics Software was written to assist Consultants, City, County and State Engineers with the hydraulic design of culverts in Iowa. The software implements the methods and standards used by the Iowa Department of Transportation (IDOT) for the hydraulic design of culverts.

The on-line user manual covers version 1 and version 2 of the software.

The additions from version 1 to version 2 include:

- USGS Flood Frequency by Lara (1987)
- Design of energy dissipators for outlet erosion control
- This user manual in an online version accessible from the software.

The software incorporates,

- Runoff Estimation
 - Iowa Runoff Chart
 - USGS Flood Frequency by Lara (1987)
 - USGS Flood Frequency by Eash (2001)

- Tailwater estimation from channel cross-section information

Iowa DOT design methodologies for
Standard designs
Taper Inlets
Drop Inlets

General Culvert Design calculations

The design of energy dissipators for outlet erosion control

For version 2.0 of the software only a version using U.S. Units is available.